

REMARKS

Claims

Claims 1-6, 8, 9 and 11-36 were pending in the application. In the Office Action dated July 20, 2009, the Examiner rejected Claims 1-6, 8-28 and 30-35, and Claims 29 and 36 were objected to. However, Claim 10 was cancelled in the previous response. In the present amendment, independent Claims 1, 20 and 30 have been amended. Therefore, Claims 1-6, 8, 9 and 11-36 remain pending in the application. Basis for the amendments can be found in the specification as originally filed and no new matter has been added.

Priority Claim under 35 USC § 119

It is noted that a claim for foreign priority has not been acknowledged in this or previous Office Actions. As acknowledged in the official filing receipt, the present application claims priority to International patent application PCT/AU03/00245 filed February 28, 2003, which claims priority from Australian provisional patent application PS0840 filed March 1, 2002. The Examiner is respectfully requested to acknowledge the claim for foreign priority.

Claim Rejections – 35 USC § 103

On pages 2-5 of the Office Action, Claims 1 and 3 were rejected under 35 USC 103(a) as being unpatentable over Chinese Utility Model Patent CN 2197409Y in view of Chinese Patent CN 2368912Y. The rejection is respectfully traversed.

On page 3 of the Office Action, the Examiner considers the “assembled forms” of CN 2197409Y as a “finished structure” and submits that the “panel forms a structural part” of this finished structure. By the expression “assembled forms”, the Applicant understands the Examiner to mean a plurality of the forms of CN 2197409Y joined together to form a “finished structure”. However, it is assumed that the Examiner understands that such a “finished structure” constituted by the forms of CN 2197409Y is in fact a temporary structure and the forms of CN 2197409Y are subsequently removed to leave the finished wall, floor etc. Hence, the forms of CN 2197409Y do not form a structural part of a finished wall, floor etc. and are not permanent. This also applies to the forms of CN 2368912Y.

In contrast, the building panel of the present invention forms a permanent structural part of a finished structure, such as a wall, floor, ceiling, fence etc., built using the building panel. The building panel of the present invention is not removed after construction, but forms part of the structure.

In light of the clear distinction between the present invention and the forms of CN 2197409Y and CN 2368912Y, Claim 1 has been amended to recite "wherein said building panel forms a permanent structural part of a finished wall, floor, ceiling or fence structure built using the building panel." Basis for this limitation can be found in the specification as filed, for example, on page 1, paragraph 1, on pages 12-15 and page 18 and the associated figures and in the last paragraph on page 20. Similar amendments have also been made to independent Claims 20 and 30 for consistency and to clearly distinguish over the prior art of record.

The arguments presented in the previous response in relation to the prior art are nonetheless applicable, but are reiterated below for the Examiner's convenience with the aforementioned amendment to independent Claims 1, 20 and 30 in mind and emphasis added. In summary, the main prior art documents relied upon by the Examiner, namely CN 2197409Y, CN 2368912Y and Scull (US 2,276,071), do not disclose a building panel which forms a permanent structural part of a finished wall, floor, ceiling or fence structure built using the building panel. Therefore, in the event that the skilled addressee combines the teachings of such documents, the skilled addressee would not arrive at the present invention as claimed.

The fully pressure rolled wide combined steel formwork of CN2197409Y is used for "cast cement engineering" as stated at the top of page 1 of the English translation of CN2197409Y. The second paragraph on page 1 of the English translation of CN2197409Y identifies problems of the prior art formwork, such as "...it requires a large effort to disassemble. The cost associated with disassembly is high and the speed for turn around use is slow.". The third paragraph on page 1 of the English translation of CN2197409Y states that "The present utility model is directed to the aforementioned issues with the prior art.". Hence, the fully pressure rolled wide combined steel formwork of CN2197409Y is re-used and clearly does not form any permanent part of a finished wall, floor, ceiling or fence structure built using the formwork.

The assembled steel-plastic formwork of CN2368912Y is also designed to be re-used. For example, the second paragraph on page 5 of the English translation of CN2368912Y

states that the benefits of ...the present invention are “1. Very light and easy to remove....4. ...no edge lines on the walls after removing the mold.” Hence, the assembled steel-plastic formwork of CN2368912Y does not form any permanent part of a finished wall, floor, ceiling or fence structure built using the formwork. Indeed, the formwork itself of CN2368912Y is designed to be dismantled. The fifth paragraph on page 3 and the fourth paragraph on page 6 of the English translation of CN2368912Y state that “The connecting bolts are used [to] for a detachable connection between the steel framework and [the] plastic panels.”. This is in stark contrast to the formed building panel of the present invention, which is unitary, is not designed to be dismantled and which forms a permancnt structural part of a finished wall, floor, ceiling or fence structure.

It is respectfully submitted that even if it would have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y and CN2368912Y, the skilled addressee would merely arrive at a type of re-useable formwork comprising a projection and not the building panel of the present invention, which forms a permanent part of the finished wall, floor, ceiling or fence structure built using the building panel. The building panel as claimed in Claim 1 is not the predictable result of combining CN2197409Y and CN2368912Y because such a combination would not and could not yield the building panel of amended Claim 1. Neither CN2197409Y nor CN2368912Y disclose a building panel which forms a permanent structural part of a finished wall, floor, ceiling or fence structure built using the building panel. Hence, the combination of CN2197409Y and CN2368912Y also fails to teach such a building panel.

With reference to the Examiner's comments in the paragraph spanning pages 12 and 13 of the Office Action, it is respectfully submitted that in light of the amendments made herewith to Claim 1, the claim limitation does not read on CN2197409Y or CN2368912Y or the combination thereof. Applicant acknowledges that CN2197409Y and CN2368912Y both disclose forms and that the skilled addressee may combine the projection/recess of CN2368912Y with the form of CN2197409Y. However, it is respectfully submitted that such a combination would not and does not result in a building panel which forms a permanent structural part of a finished wall, floor, ceiling or fence structure built using the building panel. Therefore, the building panel as claimed in Claim 1 is non-obvious to the skilled addressee over CN2197409Y in light of CN2368912Y.

The aforementioned arguments apply equally to independent Claims 20 and 30 and therefore, the methods of constructing a building structure as claimed in Claims 20 and 30 are

non-obvious over CN2197409Y in light of CN2368912Y. Furthermore, Claims 2-6, 8, 9, 11-19, 21-29 and 31-36, which depend from respective independent Claims 1, 20 and 30, are also non-obvious over CN2197409Y in light of CN2368912Y.

On pages 5-8 of the Office Action, the Examiner rejected Claims 1-6, 8, 9, 11-23, 25, 28 and 35 under 35 USC 103(a) as being unpatentable over Chinese Utility Model Patent CN 2197409Y in view of Scull (US 2,276,071). The rejection is respectfully traversed.

As detailed in the foregoing, CN 2197409Y fails to disclose, teach or suggest the combination of features recited in amended independent Claims 1, 20 and 30. In particular, CN 2197409Y merely discloses re-usable formwork and does not disclose a building panel that forms a permanent structural part of a finished wall, floor, ceiling or fence structure as claimed in independent Claim 1 or the methods of constructing a wall, floor, ceiling or fence structure as claimed in independent Claim 20 and 30.

Scull merely discloses a fibre board panel for affixing to a wall. The first paragraph of Scull states that "The present invention relates to panels or boards of a character to serve as the sheathing or facing for walls, including ceilings and the like,...". Page 1, lines 21-25 of Scull state that the primary object of the invention is to provide an edge construction for panels, boards and the like... which provide an improved wall covering. Page 1, lines 26-31 of Scull state that when the panels of Scull are laid upon a wall the edge construction of the panels permit concealment of the means for securing the panels to the supporting structure. The claims on page 2 also specify that Scull is directed to interior decorative panels/wall sheathing. Scull is therefore a wall covering rather than a structural building panel for constructing a wall. The skilled addressee would understand that a sheathing or facing is an external covering or surface layer. Clearly, the fibre board panels of Scull do not form a structural part of a finished wall, floor, ceiling or fence structure, as claimed in independent Claims 1, 20 and 30. Therefore, even if it would have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y and Scull, which Applicant submits it would not have been, the combination would not and could not result in the present invention as claimed in independent Claims 1, 20 and 30. Both CN2197409Y and Scull fail to disclose, teach or suggest a building panel which forms a structural part of a finished wall, floor, ceiling or fence structure. Hence, the combination of CN2197409Y and Scull cannot render the present invention as claimed in independent Claims 1, 20 and 30 obvious.

The aforementioned arguments in relation to the combination of CN2197409Y and Scull are equally applicable to dependent Claims 2-6, 8, 9, 11-19, 21-23, 25, 28 and 35.

Therefore, these dependent claims are also non-obvious over the combination of CN2197409Y and Scull.

On pages 8 and 9 of the Office Action, the Examiner rejected Claim 24 under 35 USC 103(a) as being unpatentable over Chinese Utility Model Patent CN 2197409Y in view of Scull (US 2,276,071) and further in view of CN2368912Y. The rejection is respectfully traversed.

Claim 24 depends on amended Claim 20 and therefore shares the combination of features recited in Claim 20. Respectfully, the foregoing clearly demonstrates that the combination of CN2197409Y and Scull does not, and cannot, result in the method of constructing a wall, floor, ceiling or fence structure as recited in amended Claim 20, irrespective of whether the combination of CN2197409Y and Scull would have been obvious to one of ordinary skill in the art. Respectfully, the foregoing also clearly demonstrates that the combination of CN2197409Y and CN2368912Y does not, and cannot, result in the method of construction recited in amended Claim 20, irrespective of whether the combination of CN2197409Y and CN2368912Y would have been obvious to one of ordinary skill in the art. Furthermore, the combination of CN2197409Y, Scull and CN2368912Y does not, and cannot, result in the method of construction recited in Claim 24, irrespective of whether such a combination would have been obvious to one of ordinary skill in the art and irrespective of the feature being added by Claim 24. The Applicant acknowledges that CN2368912Y discloses bolting formwork together and that both CN2368912Y and CN2197409Y relate to formwork. However, the formwork of CN2368912Y and CN2197409Y fail to disclose or suggest a building panel that forms a permanent structural part of a finished wall, floor, ceiling or fence structure. This short-coming is not compensated for by the disclosure of Scull. Hence, CN2197409Y, Scull and CN2368912Y fail individually and in combination to disclose, teach or suggest the method of construction recited in Claim 24.

On page 9 of the Office Action, Claims 26, 27 and 32 were rejected under 35 USC 103(a) as being unpatentable over CN2197409Y in view of Scull and further in view of Bertsche (5,809,722). The rejection is respectfully traversed.

Claims 26 and 27 depend on amended Claim 20 and therefore share the limitations thereof. Claim 32 depends on amended Claim 30 and therefore shares the limitations thereof. With reference to the foregoing, it has been clearly demonstrated that Claims 20 and 30 are non-obvious in light of the combination of CN2197409Y and Scull because, individually and in combination, CN2197409Y and Scull fail to disclose, teach or suggest the methods of

construction recited in amended Claims 20 and 30 wherein the building panel forms a permanent structural part of a finished wall, floor, ceiling or fence structure.

Bertsche discloses a reinforced concrete slab supported on a girder structure. Shearing connectors (15) extend from beams (10, 11) of an underlying girder system through apertures (16) in wood decking (D). Reinforcing or load transfer members (30) extend through apertures (19) in side plates (18) of the shearing connectors (15) and are embedded in the concrete (27) of the slab. The Applicant agrees with the Examiner that Bertsche discloses routing rods (30) through aligned apertures in a wall (18) in a reinforced concrete system, as the Examiner states on page 9 of the Office Action. However, a reinforced concrete system is not claimed by Claims 26, 27 or 32. Claims 26 and 27 recite routing reinforcing members, conduits, pipes, tubes, rods or cables through aligned apertures in the walls of a building panel in which the walls form cells in the building panel, as recited in amended Claim 20 upon which Claims 26 and 27 depend and which comprise limitations of the method of Claims 26 and 27. Similarly, Claim 32 recites coupling two of the building panels of the present invention with reinforcing members where the building panel is as specified in Claim 30. In contrast, Bertsche does not disclose, teach or suggest a building panel at all and does not disclose, teach or suggest the building panel or the methods of construction as claimed in Claims 20 or 30. The extent of the disclosure, teaching or suggestion of Bertsche is to route reinforcing members through apertures (19) in side plates (18) of shearing connectors (15) comprising part of a girder system to relieve compressive stresses from a concrete slab (S). Combining this teaching with CN2197409Y and Scull falls short of the methods of constructing a wall, floor, ceiling or fence structure recited in Claims 26, 27 or 32. Hence, even if one of ordinary skill in the art were to combine the teachings of CN2197409Y, Scull and Bertsche, they would not and could not arrive at the methods of construction as recited in Claims 26, 27 or 32.

Furthermore, a reinforced concrete slab is not a formed building panel, nor is it formwork, the subject of CN2197409Y, nor is it a wall covering, the subject of Scull. Therefore, it is respectfully submitted that it would not have been obvious to one of ordinary skill in the art to combine the teachings of CN2197409Y, Scull and Bertsche. From a technical standpoint, in an effort to reach the method of construction of Claims 26, 27 or 32 using the formed building panel of the present invention, the removable formwork of CN2197409Y is completely incompatible with the permanent reinforced concrete slab and girder structure of Bertsche and the decorative panel of Scull is completely incompatible with

Bertsche. Hence, Claims 26, 27 and 32 are also non-obvious in light of the combination of CN2197409Y, Scull and Bertsche.

On page 9 of the Office Action, Claim 34 was rejected under 35 USC 103(a) as being unpatentable over CN2197409Y in view of Scull and further in view of Azizinamini (6,871,462). The rejection is respectfully traversed.

Claim 34 depends on amended Claim 1 and therefore shares the limitations thereof. With reference to the foregoing, it has been clearly demonstrated that Claim 1 is non-obvious in light of the combination of CN2197409Y and Scull because individually and in combination CN2197409Y and Scull fail to disclose, teach or suggest the building panel recited in Claim 1 wherein the building panel forms a permanent structural part of a finished wall, floor, ceiling or fence structure. The Applicant agrees with the Examiner that Azizinamini teaches the formation of U-shapes on the top of a wall in a reinforced concrete system. However, the wall in question in Azizinamini is a plate (12) welded to a structural member (14), such as an I-beam, and not a wall of a building panel as recited in Claim 1 upon which Claim 34 depends. Azizinamini has nothing to do with building panels and does not teach, disclose or suggest a building panel which forms a permanent structural part of a finished wall, floor, ceiling or fence structure. Therefore, the combination of Azizinamini with CN2197409Y and Scull would be non-obvious to one of ordinary skill in the art. Applicant acknowledges Examiner's comment on page 13 in relation to Azizinamini. However, the combination nevertheless clearly fails to result in the building panel of Claim 34, which includes the limitations of amended Claim 1.

On page 10 of the Office Action, Claims 30, 31 and 33 were rejected under 35 USC 102(b) as being unpatentable over CN2197409Y modified by Scull in view of Lu (US 5,092,093). The rejection is respectfully traversed.

Claim 30 has been amended in a similar manner to Claim 20 to limit the method of construction to a method in which the building panels form permanent structural parts of a finished wall, floor, ceiling or fence structure. Claims 31 and 33 depend on Claim 30 and therefore share the same limitations.

With reference to the foregoing, it has been clearly demonstrated in the foregoing that Claim 30 is non-obvious in light of the combination of CN2197409Y and Scull because both individually and in combination CN2197409Y and Scull fail to disclose, teach or suggest the method of construction recited in amended Claim 30 wherein the building panels form permanent structural parts of a finished wall, floor, ceiling or fence structure.

The panels of Lu comprise two opposed wire nets (210, 210'), which sandwich a cellular body made of stacked wavy metallic strips (211) as a reinforcement unit (21). The panels of Lu are yet another considerably different panel from any of the other prior art panels of record and considerably different from the building panel of the present invention as claimed. The contribution of Lu in relation to Claims 30, 31 and 33 is limited to the teaching of spacing apart two panels and filing the space in between with concrete. However, it is respectfully submitted that one of ordinary skill in the art would not combine the teachings of Lu with those of CN2197409Y and/or Scull. Such a combination would require the combination of the temporary, removable, reusable formwork of CN2197409Y with the wire net wall panels of Lu and the non-structural, decorative fibre board, wall covering panels of Scull. It is respectfully submitted that such a combination is clearly technically incompatible and non-obvious to a person of ordinary skill in the art. Hence, independent Claim 30 and dependent Claims 31 and 33 are non-obvious.

On pages 10 and 11 of the Office Action, Claim 32 was rejected under 35 USC 102(a) as being unpatentable over CN2197409Y in view of Scull and Lu (US 5,092,093) and further in view of CN2368912Y. The rejection is respectfully traversed.

Claim 32 depends on amended Claim 30 and shares the limitations thereof. The deficiencies of CN2197409Y, Scull, Lu and CN2368912Y in relation to amended Claim 30 have been stated above. In summary, none of CN2197409Y, Scull, Lu or CN2368912Y whether considered alone or in combination disclose or suggest a method of constructing a wall, floor, ceiling or fence structure using the specified building panel of the present invention wherein the building panels form permanent structural parts of the finished wall, floor, ceiling or fence structure. Hence, Claim 32 is also non-obvious over these citations.

On pages 11 and 12 of the Office Action, Claims 20, 27 and 28 were rejected under 35 USC 103(a) as being unpatentable over JP2000257196 in view of Mayrand (US 5,551,204) and Scull. The rejection is respectfully traversed.

JP2000257196 discloses a form for concrete that can prevent concrete from degrading. A metal form body or base (12) comprises reinforcing ribs (12a) which form cells. Shorter end walls appear to comprise apertures (16) enabling adjacent forms to be joined together end-to-end, as shown in FIG 3, but cannot be joined together via longer side walls since no apertures are present in the longer side walls. Reinforcing ribs (12a) also fail to comprise apertures thus preventing the routing of conduits, services etc. through the form. A glass-fibre reinforced plastic exterior wall (14) is adhered to the metal base (12) and

comprises multiple layers (14a, 14b, 14c). Therefore, with reference to amended independent Claim 20, the form for concrete of JP 2000257196 does not disclose or suggest the following features:

- apertures in said walls such that each of said walls forming each said cell includes at least one aperture;
- a projection extending beyond at least one perimeter portion of said walls;
- a recessed section along at least one perimeter portion of said walls, sized and shaped to receive the projection of an adjacent panel;
- wherein said building panel forms a permanent structural part of a finished wall, floor, ceiling or fence structure built using the building panel.

Applicant acknowledges that Mayrand teaches apertures in walls of corrugated sheet steel and the routing of reinforcing through such apertures. Applicant also acknowledges the teaching of Scull regarding the projection and recess in decorative panels. However, the Examiner's combination of JP2000257196, Mayrand and Scull is the combination respectively of removable formwork that does not form a permanent structural part of a finished wall, floor, ceiling or fence structure with corrugated sheet steel that is used in conjunction with a concrete wall with non-structural decorative panels. It is respectfully submitted that such a combination would not be obvious to the skilled addressee and is one that would not cause the skilled addressee to arrive at the present invention as claimed in independent Claim 20 and Claims 27 and 28 dependent thereon.

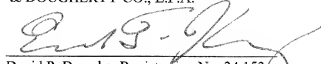
Conclusion

In conclusion, the specific combination of features recited in the amended independent Claims 1, 20 and 30 are not disclosed, suggested or rendered obvious to one of ordinary skill in the art by the prior art of record irrespective of whether the prior art citations are considered alone or in any possible combination. Consequently, the claims dependent thereon are also not anticipated or rendered obvious by the prior art of record.

In light of the above submission, the applicant considers the rejections and objections to be traversed. Accordingly, it is respectfully submitted that the application is now in condition for allowance. Reconsideration and allowance of the application is courteously solicited.

Respectfully submitted,

KRUGLIAK, WILKINS, GRIFFITHS
& DOUGHERTY CO., L.P.A.

A handwritten signature in black ink, appearing to read "Dureska", is written over a horizontal line.

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